

## **SUPERVISING PLANT PATHOLOGIST/NEMATOLOGIST**

### **DEFINITION:**

Under direction, to plan, direct, and coordinate the Plant Pathology/Nematology program; to supervise Plant Pathologists/Nematologists, and other support staff in the Plant Pathology/Nematology program; and to perform related work.

### **DISTINGUISHING CHARACTERISTICS:**

This is the supervisory and highest level class in the Plant Pathologist/Nematologist series found only in the Department of Agriculture/Weights and Measures. A Supervising Plant Pathologist/Nematologist reports to the Chief of Agriculture Services, provides first-line supervision over Plant Pathologist/Nematologists and support staff, and has overall administrative responsibility over the Plant Pathology/Nematology program.

### **EXAMPLE OF DUTIES:**

Plans, organizes, implements, and coordinates the plant disease and nematode identification program; plans, directs, coordinates, assigns, trains, and evaluates the work of Plant Pathologists/Nematologists, and other departmental staff; works closely with agricultural industries to promote and achieve compliance with laws and regulations pertaining to plant diseases and nematodes; provides consultation and education to nursery managers, growers, and other agricultural operators; performs laboratory and field examination of plants to isolate and determine the presence and identity of plant diseases and nematodes; submits lab analysis results to State officials; advises on proper methods of preventing, controlling, and eradicating plant diseases and nematodes and instructs on the use of nematicides, fungicides, fumigants, and bactericides; conducts training programs for agricultural personnel; attends meetings with State and outside agency officials to coordinate efforts and methodologies of identifying plant diseases, nematodes, and other pests; reviews literature in the fields of plant pathology and nematology; prepares documents and serves as an expert witness in matters relating to plant pathology/nematology; compiles records and documents, and prepares reports for technical, operational, and administrative use; and assists in preparing the Plant Pathology/Nematology section budget.

### **MINIMUM QUALIFICATIONS:**

#### **Thorough Knowledge of:**

- Plant pathology and nematology.
- Scientific investigative procedures and techniques used to isolate, identify, evaluate, and classify plant diseases, nematodes, and other pathogens.
- Laboratory procedures and equipment used to identify plant pathogens.
- Methods used to prevent, control, and eradicate nematodes and plant diseases.
- Usage and application of herbicides, fungicides, fumigants, and bactericides.
- Control methods utilizing biotechnology, naturalistic, and integrated pest management principles.
- Agricultural methods and marketing procedures.
- Food and Agriculture Code Provisions and applicable rules and regulations.
- Species of common and recognizable nematodes and their characteristics.
- Agricultural, horticultural, and native plants.
- Plants, plant pests, and pest control relationships to agriculture and the environment.
- Abiotic disorders of plants such as those caused by air pollution, environmental stress, and chemical injury.

**General Knowledge of:**

- Supervision and training principles and techniques.
- Program planning, coordination, organization, implementation, and evaluation principles and techniques.
- Environmental protection principles.
- Agricultural operations as a business.
- Agricultural industry concerns relating to plant diseases and nematode control laws and regulations.
- All aspects of plant pathology/nematology and related fields (entomology, botany, plant physiology, etc.).
- Statistical methods and procedures.
- Literature sources pertaining to plant pathology and nematology.
- The General Management System in principle and in practice.

**Skills and abilities to:**

- Plan, direct, coordinate, assign, train, and evaluate the work of subordinate staff involved in plant pathology/nematology functions and programs.
- Develop and coordinate departmental procedures to effectively accomplish the goals of State-mandated agricultural programs related to plant pathology and nematology.
- Evaluate and develop laboratory procedures.
- Identify nematodes, plant diseases, and abiotic disorders.
- Properly utilize a wide range of laboratory instruments including compound and electron microscopes.
- Develop solutions to plant pest control problems.
- Maintain currency in the plant pathology field.
- Evaluate, resolve, and respond to sensitive issues, including industry or citizen concerns.

**EDUCATION/EXPERIENCE:**

Education, training, and/or experience which clearly demonstrate possession of the knowledge, skills and abilities stated above. Examples of qualifying education/experience are: A Bachelor of Science degree in one of the biological sciences, with emphasis on coursework in plant pathology, nematology, mycology, bacteriology, and virology; AND, three (3) years of experience performing laboratory examinations and analysis in identifying and diagnosing the presence of plant pathogens and nematodes; OR, one (1) year of experience as a Plant Pathologist/Nematologist for the County of San Diego.

**Note:** Previous experience providing full supervision over subordinate staff performing plant pathogen/nematode identification and diagnosis is highly desirable.

**SPECIAL NOTES, LICENSES, OR REQUIREMENTS:****Certification:**

Incumbents must possess, or acquire within two (2) years of appointment, licenses in the two Agricultural Biologist (Inspector) categories listed below as issued by the Director of the California Department of Food and Agriculture:

- Plant Quarantine and Pest Detection
- Nursery and Seed Regulation

**License:**

A valid California Class C driver's license or the ability to arrange transportation for field travel is required at the time of appointment and must be maintained throughout employment. Employees in this class may be required to use their personal vehicle.

**Probationary Period:**

Incumbents appointed to permanent positions in this class shall serve a probationary period of twelve months. (Civil

Service Rule 4.2.5).